## **ABSTRACT**

According to the present invention, an air cooling dry vacuum pump has an excellent heat exchangeability and is capable of discharging clean exhaust gases, allowing an installation 5 space to be reduced due to a small and compact size, and reduced in weight, noise, manufacturing cost, and equipment cost. The vacuum pump includes a rotor (2), rotating by receiving a driving force of a motor (M) as a driving source of rotation, being received in a casing 1 having an inlet (1a) of fluid and 10 an outlet (1b) of the fluid. An air supplying means is provided at one end (1c) in an axial direction (I) of the casing. The casing is formed into a duplex tube structure having an inner tube (4) receiving the rotor (2) rotatably and an outer tube (5) around the inner tube. An air duct (7) for flowing cooling 15 air (W) by the air supplying means is provided between the inner tube and the outer tube along the axial direction (I).